

**Amendments to the Specification:**

Please replace paragraphs [0004], [0023], and [0024] with the following amended paragraphs, respectively:

- [0004] Fig.1 shows a power calibration system 100 as disclosed by Liu, et al. in  
5 published U.S. Patent application No. 2003/0208332A1. Referring to Fig.1, the power  
calibration system 100 is used for calibrating a laser diode 102 of the optical recording  
drive 104 (~~Jason: Numeral 104 is not shown in Fig. 1. Please add.~~), wherein the laser  
diode 102 is positioned within an optical recording drive 104. The optical recording drive  
104 comprises an optical disc plate 106, which can move in and out of the optical  
10 recording drive 104. A first module 108 is positioned upon the laser diode 102 in order to  
receive the laser beam from laser diode 102. The second module 110 is coupled to the  
first module 108 and a computer 112, and the computer 112 is coupled to the first module  
108 and the optical recording drive 104.
- 15 [0023] At this point, the preliminary power relationship determined by the  
microprocessor 202 is sufficiently accurate to be used to control the read power of the LD  
210. However, there is a uncertainty (for example, approximately 10% value variation)  
between particular front monitor signals  $V_{FMD}$  of different FMDs 212 of different optical  
drives 200. Because the write laser power of the LD 210 is desired to be controlled  
20 precisely in order to ensure accurate pit creation during the recording phase of an optical  
disc, in a preferred embodiment of the present invention, the preliminary power  
relationship is further corrected using a power relationship correction operation. The  
power relationship correction operation is performed on an optical disc of the optical  
device 200 during the automatic calibration process at the manufacture. During the  
25 automatic calibration process, the microprocessor 202 controls the optical drive 200 to  
write test data to an optical disc of the optical device ~~[[202]]~~ 200 using a particular drive  
signal DS value for a predetermined power value. The preliminary power relationship

(Fig.5) is used by the microprocessor 202 to determine the value of the drive signal DS to use for the predetermined power value. The microprocessor 202 then reads a read signal corresponding to the test data from the optical disc. Finally, the microprocessor 202 analyzes the read signal to determine if the test data was written to the optical disc at the particular power. According to the result of the analysis, the preliminary power relationship is correspondingly adjusted such that the test data is written to the optical disc at the predetermined power. One or more iterations of the power relationship correction operation could be performed to thereby obtain a final power relationship having an accurate drive signal to LD 210 power values for the particular FMD 212.

[0024] There are various implantations of the power relationship correction operation. One example is the Optimum Power Control (OPC) process commonly performed by optical disc drives of the related art before recording information on an optical disc. Because different optical discs have different optimal laser write power requirements, the OPC process is used by the related art optical devices to optimize the write power of the laser diode according to a specified optimal power requirement for particular optical disc. Typically, the OPC process is performed by the related art optical devices in an OPC section of the ~~optimal~~ optical disc. The OPC section must be used because the OPC process involves writing test data to the optical disc that if not written in the OPC section, would interfere with user data stored on the optical disc. As the OPC process is well known to a person of ordinary skill in the art, further description of the specific operations of the OPC process is omitted herein. However, it should also be noted that in this embodiment, because the present invention uses the OPC process as the power relationship correction operation that is performed at the manufacturer, there is no concern with interfering with user data stored on the optical disc. Therefore, the power relationship correction operation can be a modified OPC process being performed in any section of the optical disc, for example, a user data area of the optical disc, which is not dedicated to OPC process for writing test data thereto.